Impact of small ruminant diseases on different household members in Ethiopia

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Background

- Small ruminants serve multiple livelihood roles for Ethiopian small holders
- Women play important role in small rumiant production
- Little is known on how disease impact and risk mitigation strategies differ among household members

→ understanding of these issues is pivotal to design sustainable livestock health interventions

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Objectives

This study aimed at

- identifying disease constraints
- assess impacts of disease constraints as perceived by men and women in mixed crop-livestock and agro-pastoralist systems

Materials and methods

1. Focus groups discussions (FGDs)

- In 23 villages in 4 regions, Oromia, Tigray, Amhara and SNNPR, in Ethiopia
- In each village separate FGDs were held with women, men, young women and young men
- Participatory tools: simple ranking, proportional piling and seasonal calendar

Materials and methods

2. Household survey

- 440 household in the same areas
- 50% of interviews conducted with women, 50% with men
- Questions based on FGD findings

Quantify/rank impacts

In FGDs:

For identified important diseases, farmers were asked

- how the disease impacts the household
- which household members most affected
- proportional piling for M, W, YM, YF, CH

In HH survey:

- 3 main impacts for the 3 most important diseases
- recorded according to impact categories from FGDs

Results

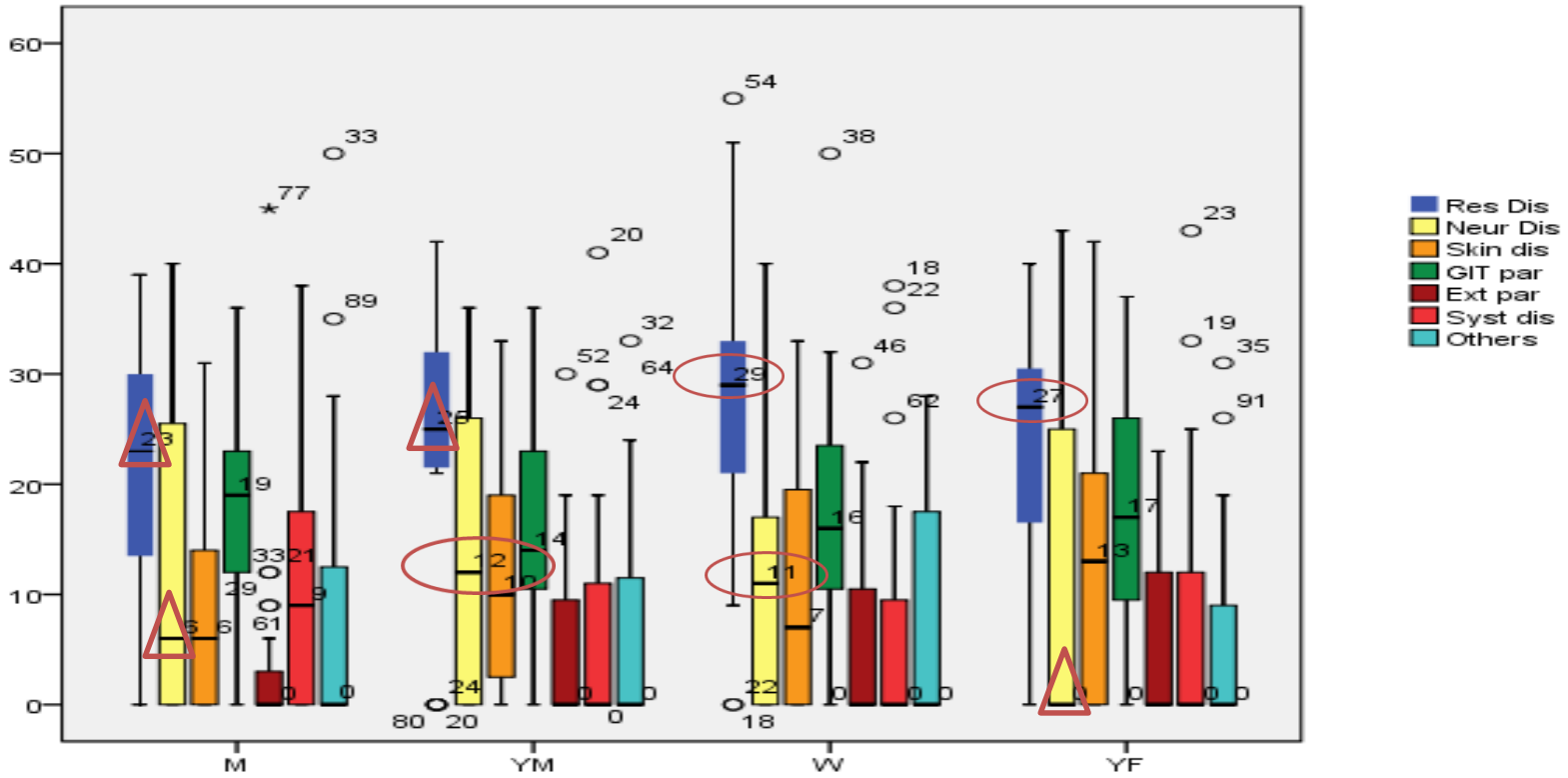
Disease Priority: agro-ecology

	Highland Woredas		Lowland Woredas	
Disease Category	Mean rank score	Test statistics	Mean rank score	Test statistics
Respiratory dis	6.10	N=68	4.40	N=24
Neurological dis	4.40	Kendall's W= 0.38	3.23	Kendall's W= 0.09
Skin dis	3.93	Chi-Square= 153.952	4.15	Chi-Square=12.382
GIT	5.01	Df=6	4.44	Df=6
External par	2.71	Asymp. Sig.= 0.000	3.69	Asymp. Sig.= 0.054
Systemic	2.72		4.81	
Other	3.13		3.29	

- In highland areas (mixed crop-livestock system): priorities were respiratory diseases and GIT parasites with strong agreement among respondent groups
- In lowland areas (pastoral and agro-pastoral system): priorities were systemic diseases and neurological diseases, differences between regions

Results

Disease priority: gender



- Women and young female scored respiratory diseases higher than young male and men
- Young men and women scored neurological diseases higher than men and young female

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Results

Impact categories identified in FGDs

Economical

- Financial: loss of income
- Mortality
- Productivity: poor growth rates & weight gain, lack of milk for offspring
- Value: meat quality, hide quality
- Costs: for treatment
- Waste of time

Social

- Social/psychological: status, taxes unpaid, no mixing with other animals
- Drop out of school: school fees unpaid
- Migration for other jobs in cities

Human

- Food security/malnutrition
- Human health

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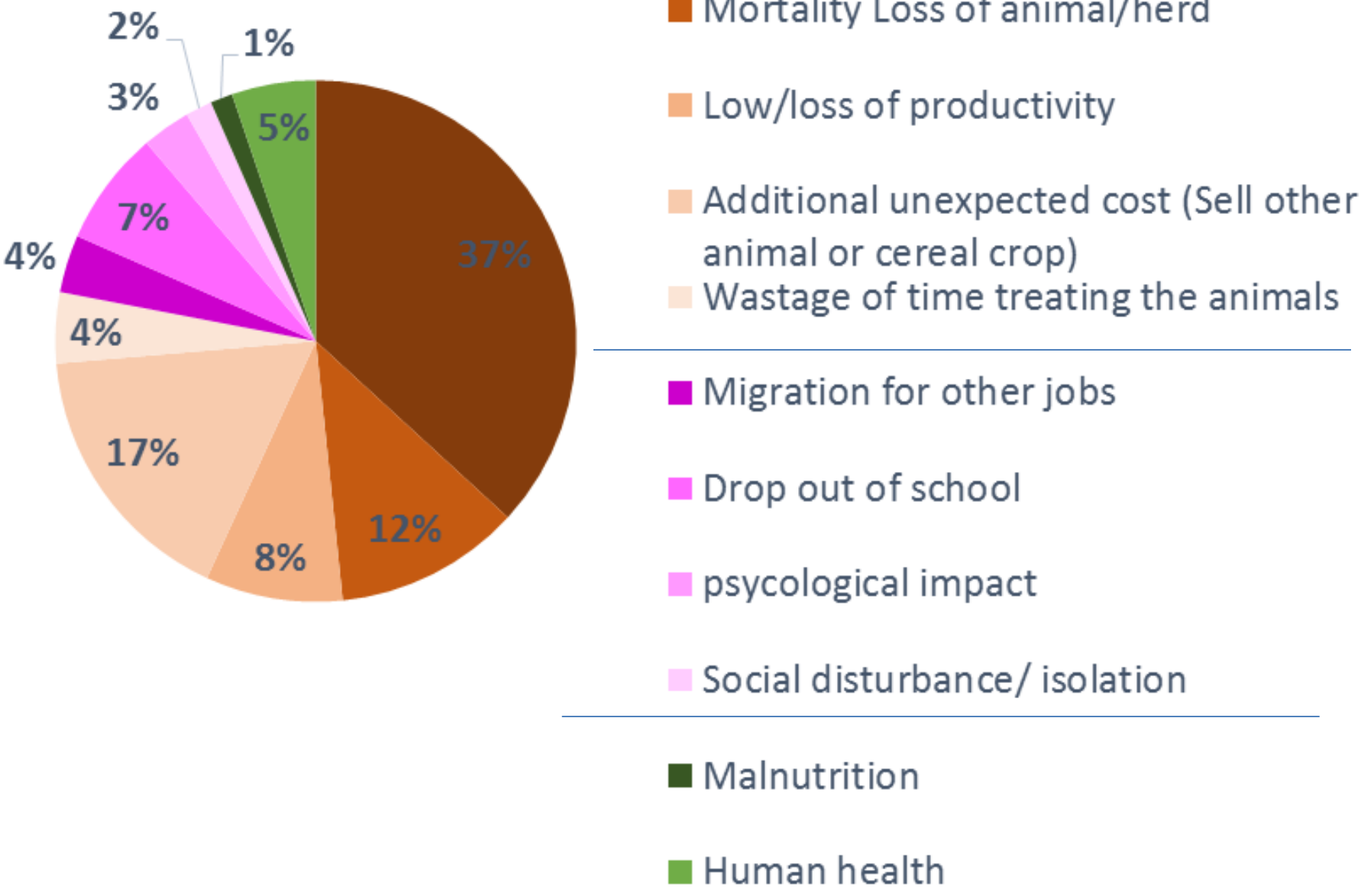
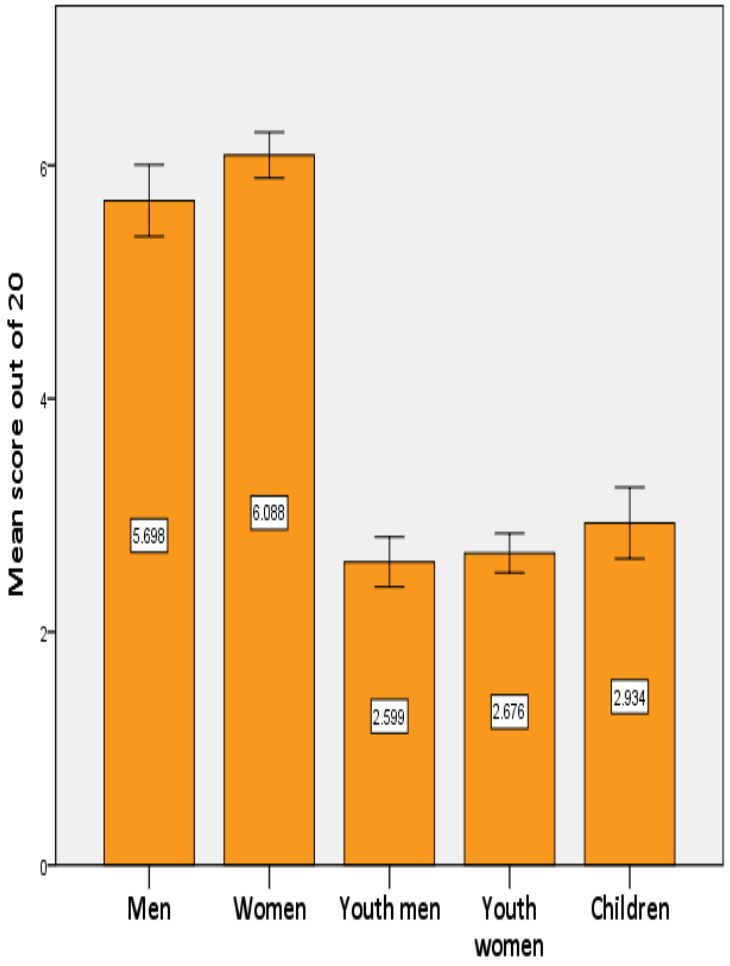

2%
1%
3%
5%
7%
4%
37%
4%
17%
8%
12%
Financial /Loss of income
Mortality Loss of animal/herd
Low/loss of productivity
Additional unexpected cost (Sell other animal or cereal crop)
Wastage of time treating the animals
Migration for other jobs
Drop out of school
psycological impact
Social disturbance/ isolation
Malnutrition
Human health

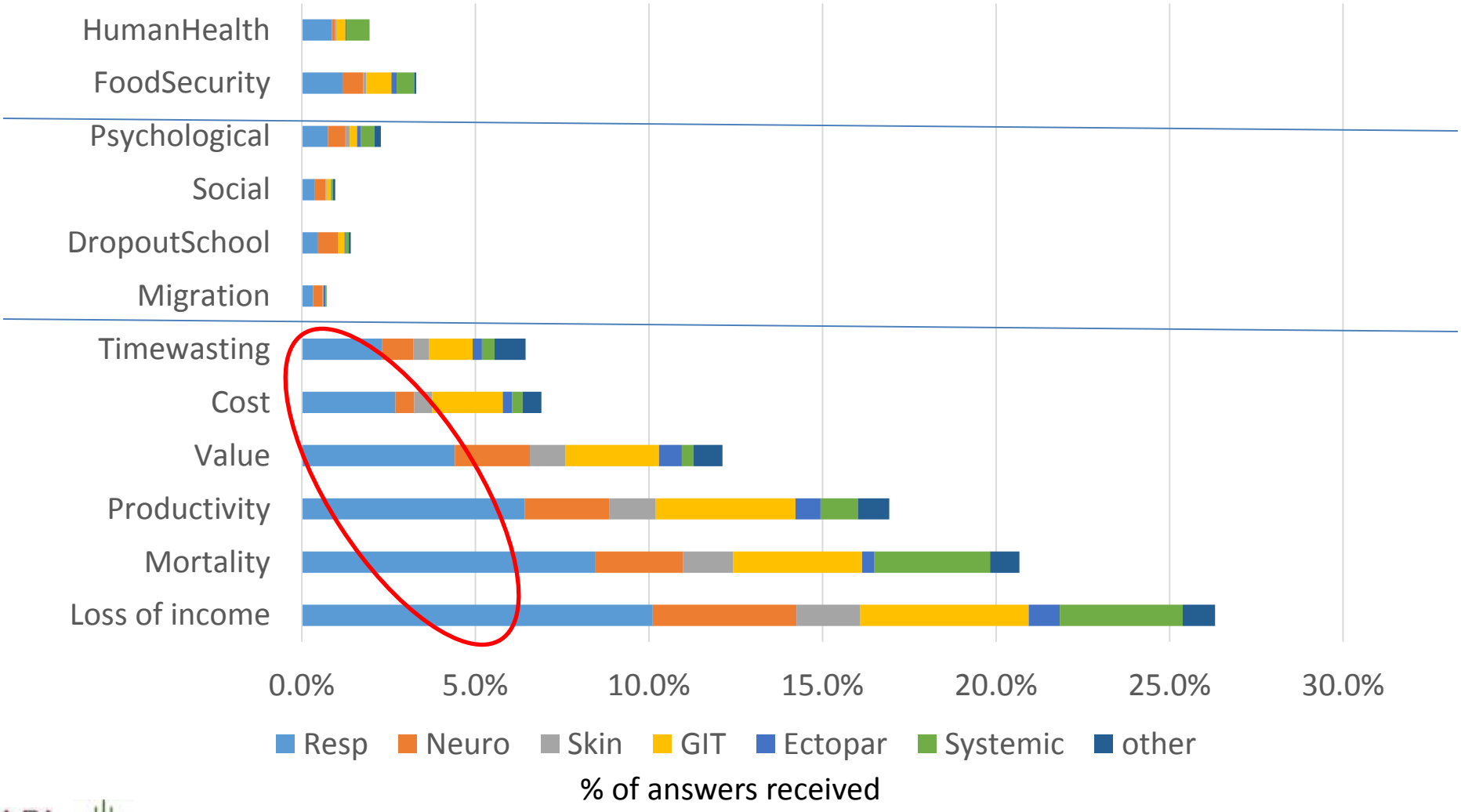
Who is affected from the HH? Why?

Women are most severely affected

- women bear the main responsibility of looking after diseased animals
- In order to fulfill their household duties (children, food), they rely on income from small ruminants
- Lack of other income sources if animals are lost due to disease
- For men it is easier find other work if for some reason animals are lost



Impact by disease categories



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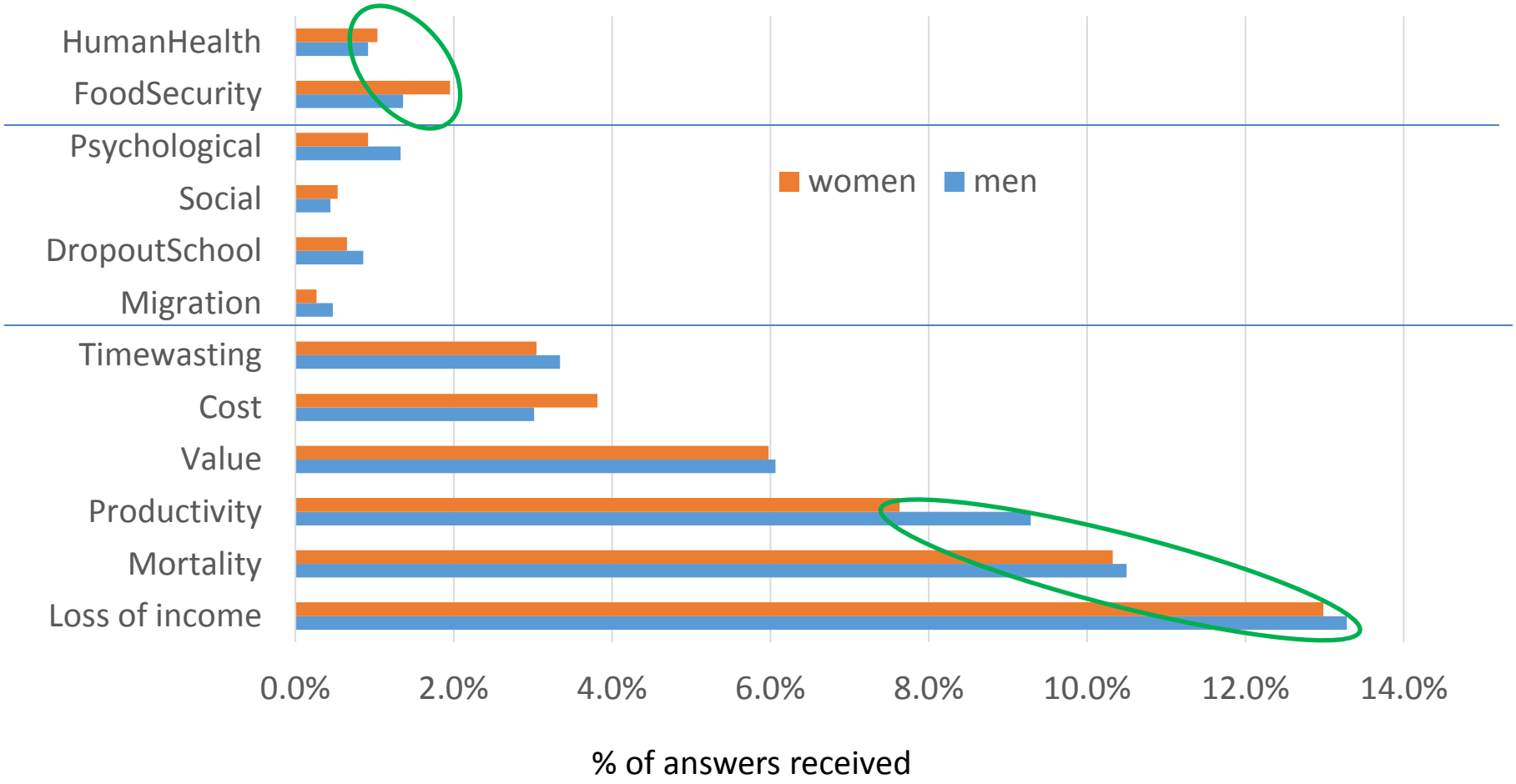
Impact perception: by gender



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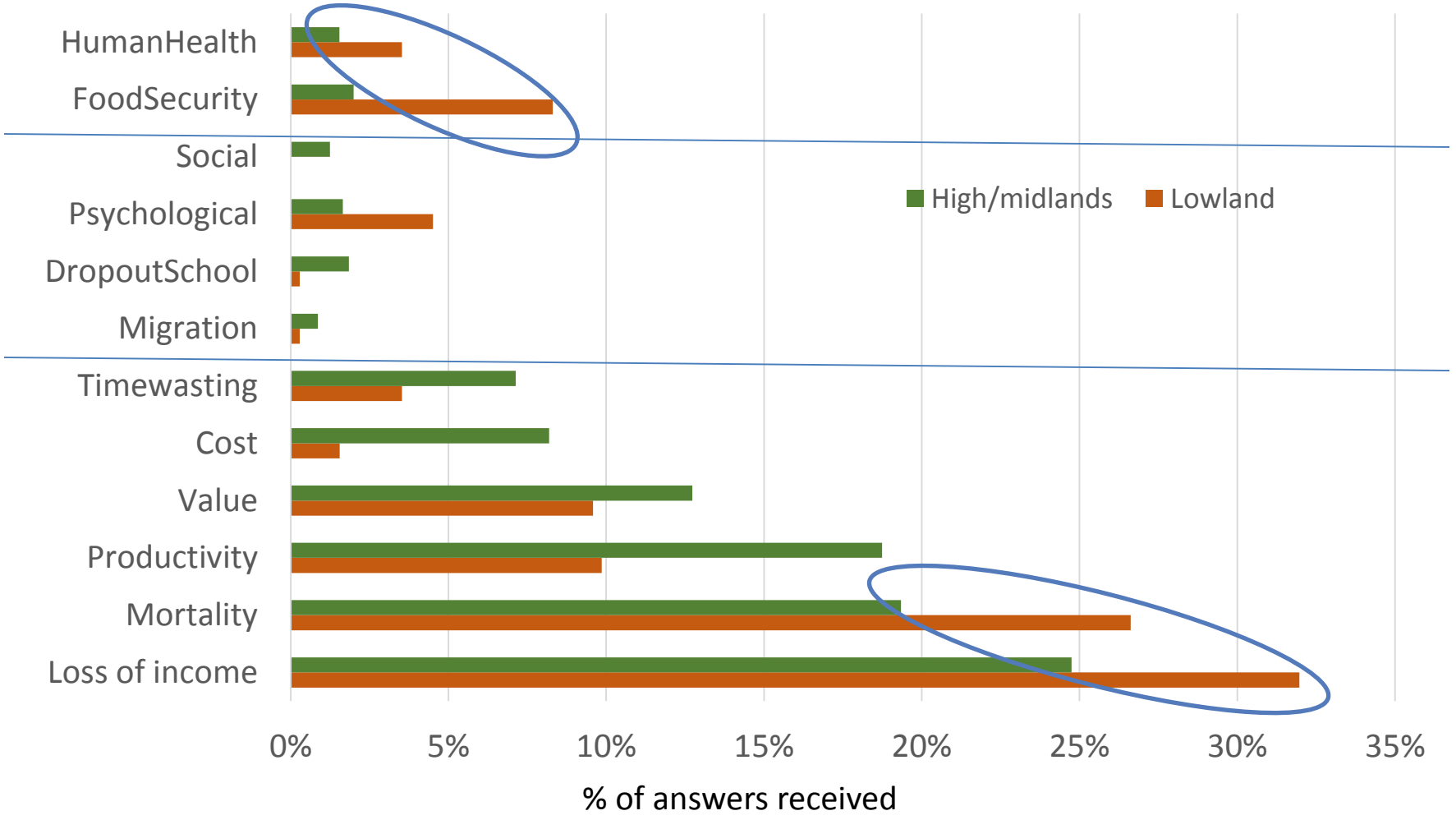
Impact: Agro-ecology



Conclusions

- Impact of SR diseases highly important in women
- Understanding of impacts almost similar in men and women
- Need to take gender into account when designing small ruminant health interventions

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